

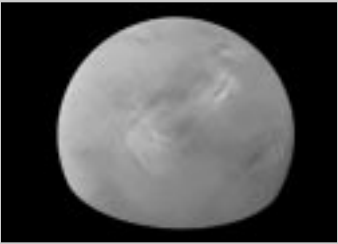
Space News ROUNDUP!

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New program brings JSC news to workstations

By Mike Garren

Starting Monday, JSC will have a new mechanism for spreading news throughout the center over its computer networks.

Called NASA News, or NNews, the new system is a virtual screen saver bulletin board similar to the commercially developed PointCast, that is linked to the center's web sites. The NNews Project originated as an action from the Executive Safety

Committee to enable the delivery of general safety information to all employees, to spread information of an emergency nature such as weather warnings in a speedy manner, and to deliver information of centerwide interest in a way that doesn't require employees to find it on their own.

The application was developed in-house by Charles Salkowski, chief of Engineering's Manufacturing and Process Development Branch, originally

as a way to disseminate metrics within his organization. Salkowski and the safety committee soon realized that with little modification the system could be used to meet the challenge of developing the emergency broadcast system features.

As a screen saver or as an application employees will have the center's Safety Alerts and JSC News at their fingertips. In the works are a revised form of The Daily Cyber

Space Roundup, JSC weather, plus current news published by each organization that has elected to do so.

As NNews users, employees may choose the organization news to view down to the two-letter organization code, provided that organization is publishing information. For example, users may choose to receive only their own organization's news or a combination of different organizations'

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NASA Photo by Karla Thomas

The X-38 atmospheric test vehicle kicks up dust as it lands in the Mojave Desert following its first unpowered flight test on March 12. The test concentrated on the use of the X-38's parafoil parachute, which deployed as planned within seconds after the vehicle's release from the B-52 and guided the test craft to landing.

By James Hartsfield

Development of the X-38, an innovative new spacecraft design planned for use as a future International Space Station emergency crew return "lifeboat," passed a major milestone on March 12 with a successful first unpowered flight test.

The first X-38 atmospheric test vehicle was launched from under the wing of NASA's B-52 aircraft at the Dryden Flight Research Center, Edwards, Calif., at 10:30 a.m. CDT and completed a descent from a 23,000 foot altitude at 10:38 a.m. The test focused on the use of the X-38's parafoil parachute, which deployed as planned within seconds after the vehicle's release from the B-52 and guided the test craft to landing, the softest so far in the development test series.

"This was a real experimental flight test," X-38 project manager John Muratore said. "No one had ever tried to do anything like this before. Through ground and flight test we tried to reduce or eliminate

all of our risk, but in the end, we had to prove the concept through full-scale flight. We proved the basic concept on the first flight and on the next 19 flights we will refine the concept to prove we are ready to bring the X-38 back from space."

Atmospheric drop tests of the X-38 will continue for the next two years using three increasingly complex test vehicles. The drop tests will increase in altitude to a height of 50,000 feet and include longer flight times for the test craft prior to deployment of the parafoil. In 2000, an unpowered space test vehicle is planned to be deployed from a space shuttle and descend to a landing. The X-38 crew return vehicle is targeted to begin operations aboard the International Space Station in 2003.

"The X-38 is the first JSC X-vehicle and the first vehicle ever built at JSC," Muratore added. "This was a real team effort—every organization on the center made some contribu-

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College students fly experiments on KC-135

Forty-eight teams of undergraduate college students from around the country are "floating" through school this month aboard a NASA research aircraft.

The teams are here for the 1998 NASA Reduced Gravity Student Flight Opportunities program, funded by NASA and administered by the Texas Space Grant Consortium, Austin.

Each team consists of up to four undergraduate-level college stu-

dents, a supervising professor and a professional journalist. All team members, except the supervising professor, have the opportunity to fly.

Teams are flying experiments aboard NASA's KC-135A aircraft that uses a roller-coaster-like flight profile over the Gulf of Mexico to provide brief periods of microgravity. Each team will fly twice, and each flight will include approximately 40 parabolic arcs. During each two- to three-hour flight, passengers and

their experiments can experience about 25 seconds of zero-gravity.

This year's teams are divided into two groups: Group A arrived March 16, and Group B arrived March 23. During the first week, participants received pre-flight training, and assembled and tested their experiment packages.

During the second week, they flew with their experiments, adjusted their equipment, and conducted post-flight reviews.

In addition to performing the experiments, each team developed a program for sharing research results with teachers, students, and the general public after the flights.

Participants will analyze their data, prepare educational or informational materials, and submit final reports.

A list of the selected teams and additional information about the program can be found on the Internet at the following address: <http://www.tsgc.utexas.edu/tsgc/floatn/>

Node 1 passes critical leak check in Florida

Node 1, the first U.S.-built International Space Station element, last week passed with flying colors a key test of its functional readiness for launch.

The two-week-long pressurized leak test, which ended March 18, confirmed that the more than 170 seals on the connecting passageway to the living and working areas of the space station are tight and ready to support human inhabitants.

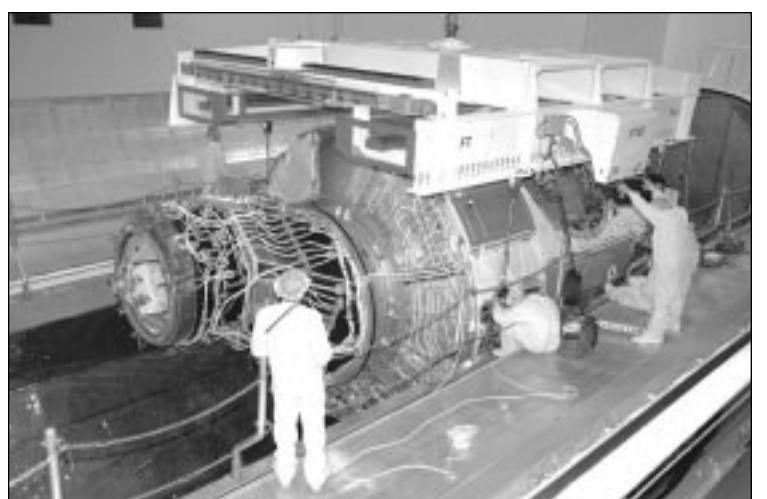
"The successful completion of the Node element leak test is a significant milestone for the 2A team," said Bill Bastedo, manager for Launch Package 2A, which will go aloft aboard the Space Shuttle *Endeavour* later

this year. "We have now successfully leak tested Pressurized Mating Adapters-1 and 2 as well as Node 1 and all three have performed much better than specifications call for."

The test followed the removal of Node 1 from the element rotation test stand for an interim weight and center of gravity determination.

The leak check took place behind the closed doors of the shuttle payload transportation canister in Kennedy Space Center's Space Station Processing Facility. The node was pressurized with a combination of helium and air. Then, the interior of the canister was monitored for any

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NASA Photo

Technicians in Kennedy Space Center's Space Station Processing Facility prepare Node 1 and Pressurized Mating Adapters 1 and 2 for a leak test that verified its ability to support human habitation.